P-002

Police Modifier Bulletin

SVE BULLETIN

SPECIAL VEHICLE ENGINEERING – BODY BUILDERS ADVISORY SERVICE

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Date: 3 April, 2012

2013 Sedan & Utility AWD Police Interceptors Speedometer Calibration Procedure

Models Affected

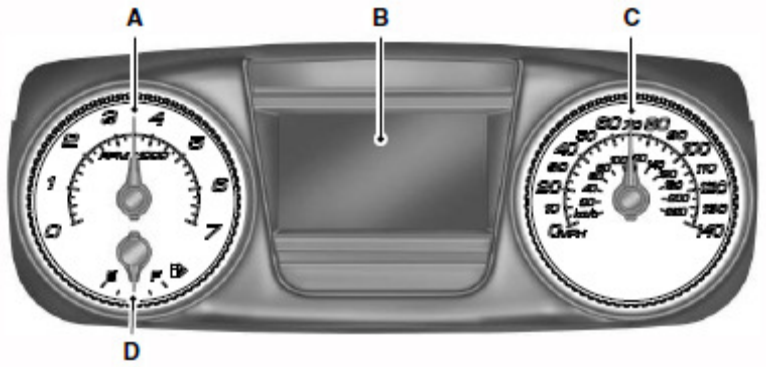
2013 Sedan & Utility All-Wheel-Drive (AWD) Police Interceptor applications beginning 2013MY.

Purpose

This bulletin provides methods to law enforcement agencies that utilize a 2-Wheel-Drive dyno for speedometer calibration of AWD vehicles.
The vehicle is shipped with a certified speedometer. If your local procedures require calibration, utilize the distance per time on-road test. If a dynamometer calibration is required, reference the calibration procedure found at www.Fleet.Ford.com or check OASIS for updated information.

Speedometer

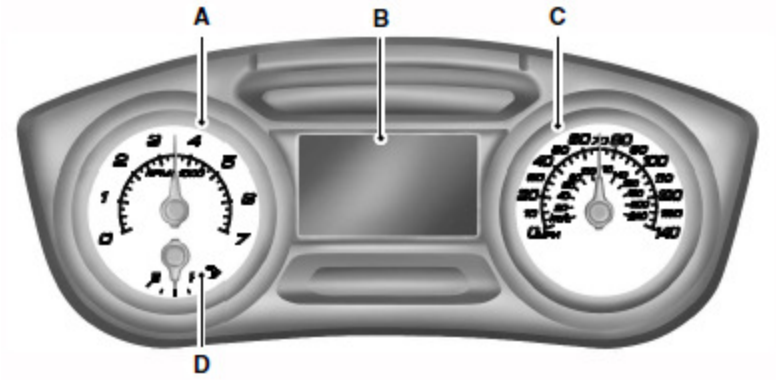
Sedan cluster shown in standard measure – optional and metric clusters similar



A. Tachometer
B. Information display. See *Information displays* for more information.
C. Speedometer
D. Fuel gauge

Speedometer

Utility cluster shown in standard measure – optional and metric clusters similar



A. Tachometer
B. Information display. See *Information displays* for more information.
C. Speedometer
D. Fuel gauge

AWD Speedometer Calibration Methods

Method #1 – Distance per time on-road test

- **Drive the vehicle a specified distance at a constant speed and record the time required to travel the specified distance**
- **Use the distance per time relationship (speed = distance/time) to validate the speedometer**

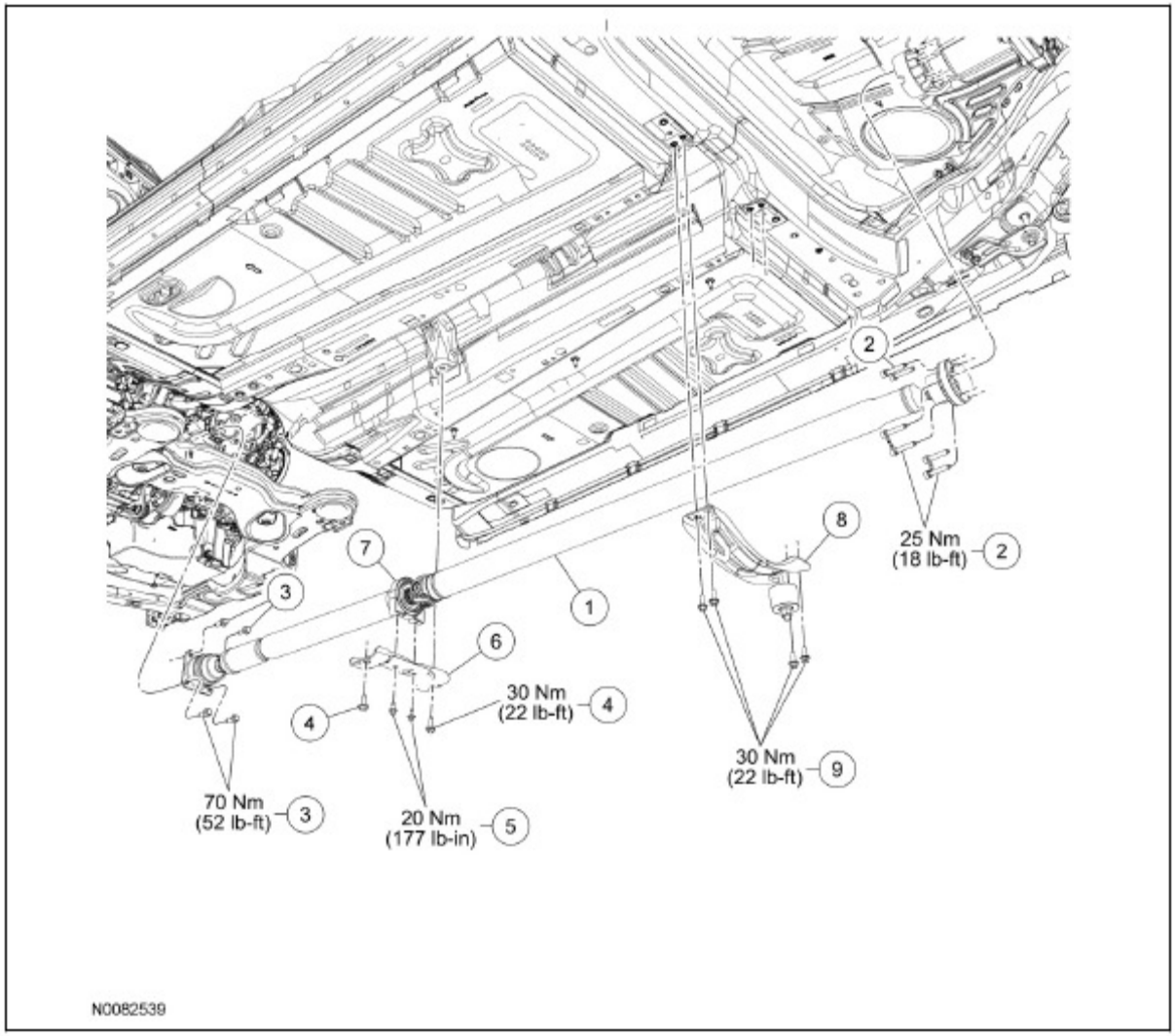
Method #2 – 2-wheel-drive dyno to calibrate AWD vehicles only

Inspect cluster for warning lights / MIL lights.

Check codes and repair vehicle accordingly.

Method #2 – 2-wheel-drive dyno to calibrate AWD vehicles only (continued)

Remove driveshaft per Workshop Manual procedure – refer to Workshop Manual for most recent procedure
Driveshaft



Item	Part Number	Description
1	4R602	Driveshaft assembly
2	W790063	Rear Drive Unit (RDU) pinion flange bolt and washer assemblies (3 required)
3	W711918	Power Transfer Unit (PTU) flange bolts (4 required)
4	W701834	Outer center bearing bracket bolts (2 required)
5	W500220	Inner center bearing bolts (2 required)
6	4B403	Center bearing bracket
7	—	Center bearing (part of 4602)
8	5A204	Exhaust support brace
9	—	Exhaust support brace bolts (part of 5A204) (4 required)

Method #2 – 2-wheel-drive dyno to calibrate AWD vehicles only (continued)

Driveshaft removal

NOTE:

Index-mark both driveshaft flanges.

With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to Section 100-02 of the Workshop Manual for the 2013MY Police Interceptor.

Remove the muffler and tailpipe. For additional information, refer to Section 309-00 of the Workshop Manual

Remove the 4 exhaust support brace bolts and the exhaust brace.

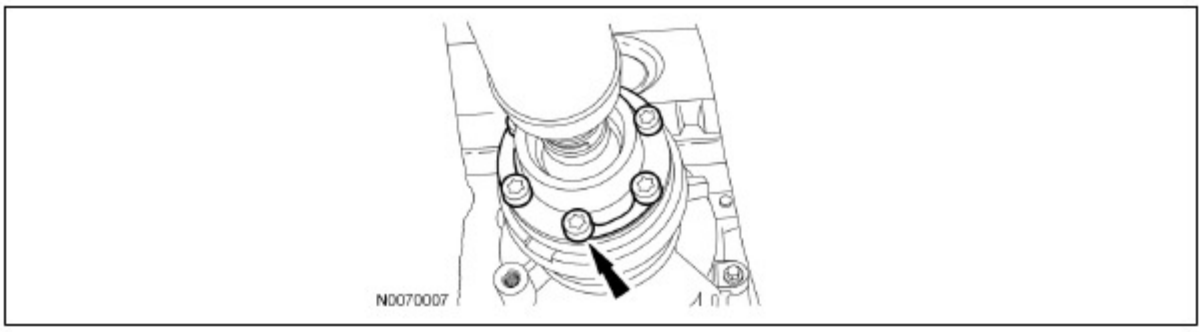
- To install, tighten to 30 Nm (22 lbs-ft)

Notice:

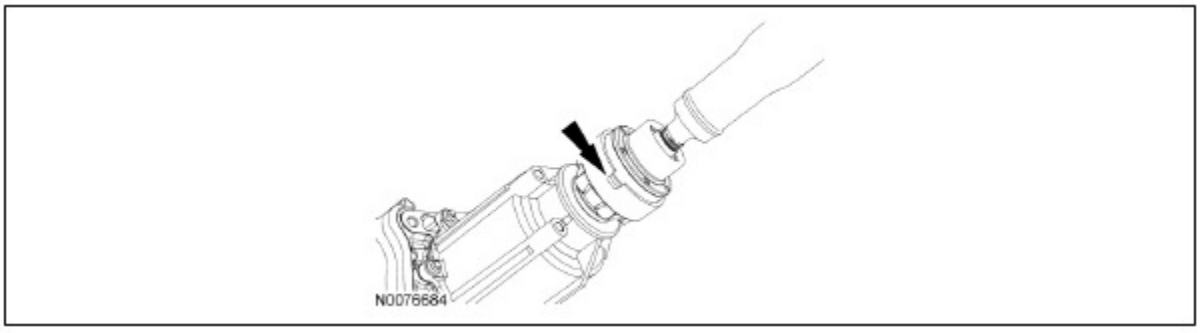
Do not reuse the bolt and washer assemblies for the rear Constant Velocity (CV) joint flange. Install new assemblies or damage to the vehicle may occur.

Remove and discard the 3 Rear Drive Unit (RDU) pinion flange bolt and washer assemblies.

- To install, tighten to 25 Nm (18 lb-ft).



Separate the CV flange from the RDU flange using a flat-blade screwdriver in the area shown.



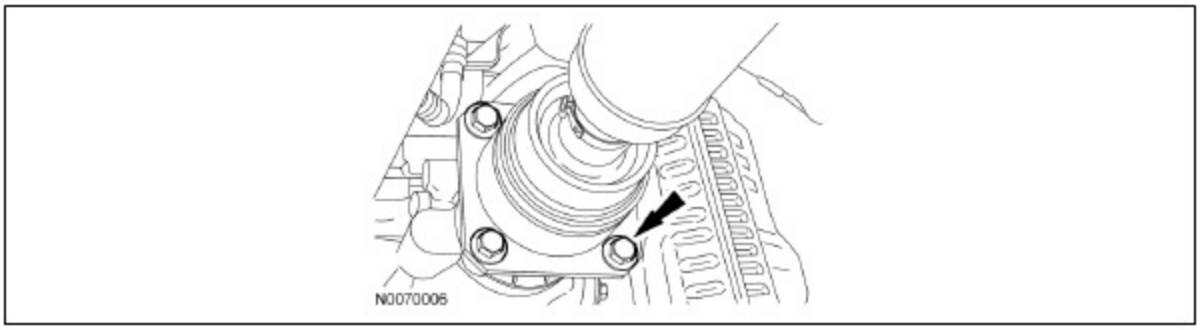
Notice:

Do not reuse the Constant Velocity (CV) joint bolts. Install new bolts or damage to the vehicle may occur.

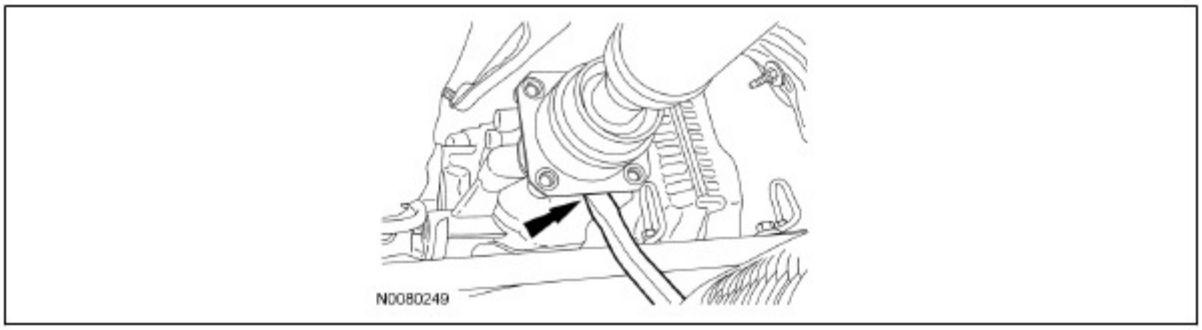
Method #2 – 2-wheel-drive dyno to calibrate AWD vehicles only (continued)

Remove and discard the 4 Power Transfer Unit (PTU) flange bolts.

- To install, tighten to 70 Nm (52 lb-ft).

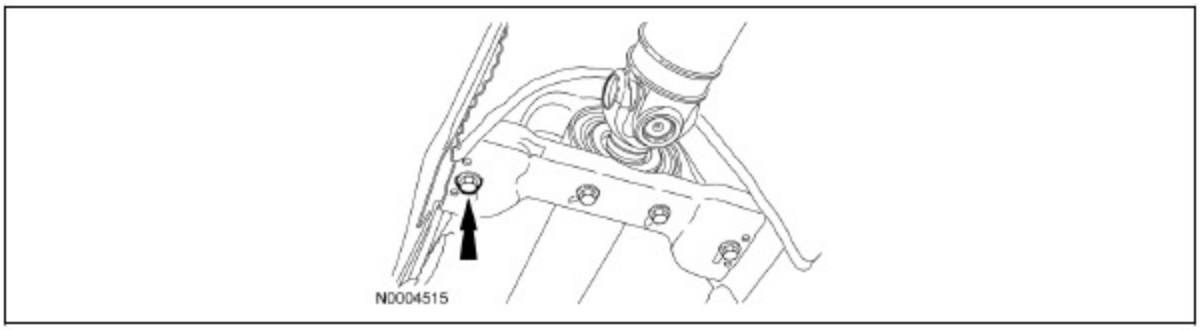


Using a suitable prybar as shown, separate the driveshaft flange from the PTU flange.



With the help of an assistant, remove the 2 outer center bearing bracket bolts and the driveshaft.

- To install, tighten to 30 Nm (22 lb-ft)



NOTE:

If a driveshaft is installed and driveshaft vibration is encountered after installation, index the driveshaft. For additional information refer to Section 205-00.

To install, reverse the removal process.

Method #2 – 2-wheel-drive dyno to calibrate AWD vehicles only (continued)

Under Driver Assist menu option in message center. Select Traction Control OFF in the menu.

Calibrate speedometer according to local procedure: Line up front tires on rollers and set parking brake. Peform calibration. Warning message "coupling speed code" or similar message will display during this testing. Remove vehicle from rollers.

Install driveshaft per Workshop Manual procedure.

Clear codes from step 5 above.

If you have any questions, please contact the Ford Truck Body Builders Advisory Service as shown in the header of this bulletin.